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ORIGINAL ARTICLE

A theory-based intervention to promote medication adherence in patients with rheumatoid arthritis: A randomized controlled trial

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Abstract

Introduction/objectives Adherence to prescribed medication regimens is fundamental to the improvement and maintenance of the health of patients with rheumatoid arthritis. It is therefore important that interventions are developed to address this important health behavior issue. The aim of the present study was to design and evaluate a theory-based intervention to improve the medication adherence (primary outcome) among rheumatoid arthritis patients.

Methods The study adopted a pre-registered randomized controlled trial design. Rheumatoid arthritis patients were recruited from two University teaching hospitals in Qazvin, Iran from June 2018 to May 2019 and randomly assigned to either an intervention group ($n = 100$) or a treatment-as-usual group (n = 100). The intervention group received a theory-based intervention designed based on the theoretical underpinnings of the health action process approach (HAPA). More specifically, action planning (making detailed plans to follow medication regimen), coping planning (constructing plans to overcome potential obstacles that may arise in medication adherence), and self-monitoring (using a calendar to record medication adherence) of the HAPA has been used for the treatment. The treatment-as-usual group received standard care.

Results Data analysis was conducted based on the principle of intention to treat. Using a linear mixed-effects model (adjusted for age, sex, medication prescribed, and body mass index), the results showed improved medication adherence scores in the intervention group (loss to follow-up = 16) compared to the treatment-as-usual group (loss to follow-up = 12) at the 3-month (coefficient = 3.9; SE = 0.8) and 6-month (coefficient = 4.5; SE = 0.8) follow-up. Intervention effects on medication adherence

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